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# NYU Stern Economic Outlook Forum

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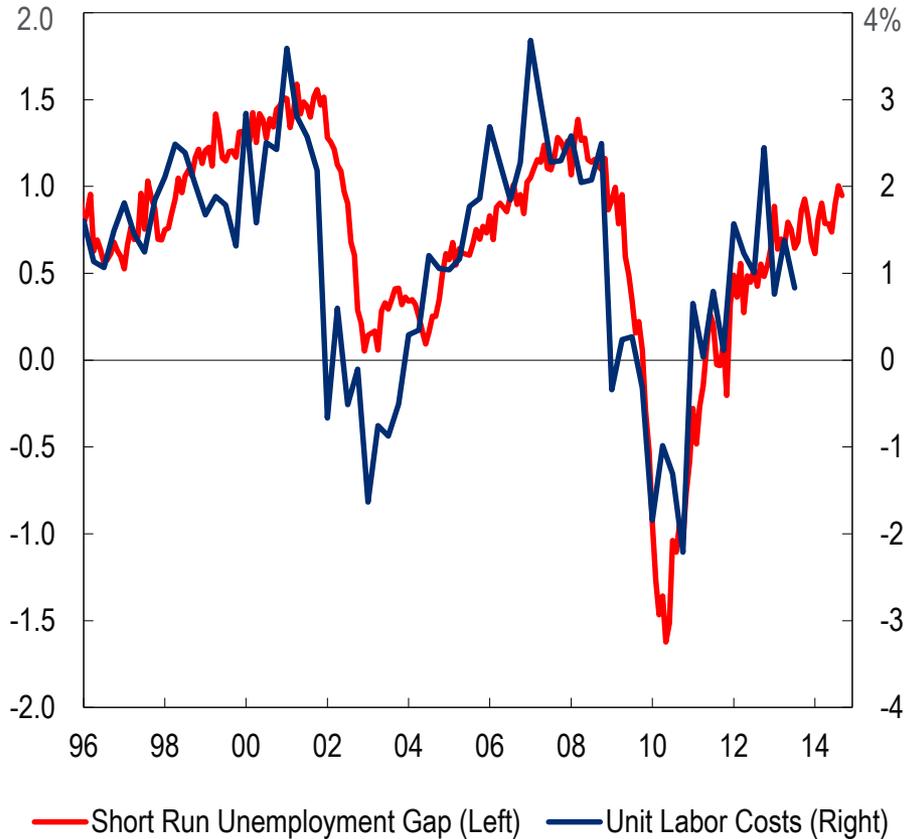
# Two Views of Declining Labor Force Participation

- **It's Temporary.** Drop in labor force participation (LFPR) since 2007 reveals cyclical effect of unemployment previously masked by dominant demographics and too brief recessions.
  - *Downturn in LFPR associated with surge in long-term unemployed*
  - *Correlation at state level between rising unemployment and falling LFPR.*
  - *Large increase in discouraged workers, non-participants who want a job.*
  - *Job-finding rates fell proportionately for recent and long-term jobless.*
- Delayed response (increase) to falling unemployment implies that LFPR will rise strongly for years after the economy reaches full employment.
- **No, it's Permanent.** Major part of LFPR drop reflects mix of demographic, structural and other policy effects that may be only partially reversed over only a very long period.
  - *Population shifting to less-attached cohorts, including older, still prime-age workers.*
  - *LFPR among prime-age women falling since 2000, high low-income marginal tax rates.*
  - *Rising education enrollment.*
  - *Accelerating trend in disabilities suggests more permanent hysteresis effect.*
  - *Recent declines in discouraged workers and 'not in labor force who want a job'*
- ✓ BLS projects that LFPR will decline another 1.5 percentage points by 2022.

# Monitoring Labor Market Tightening

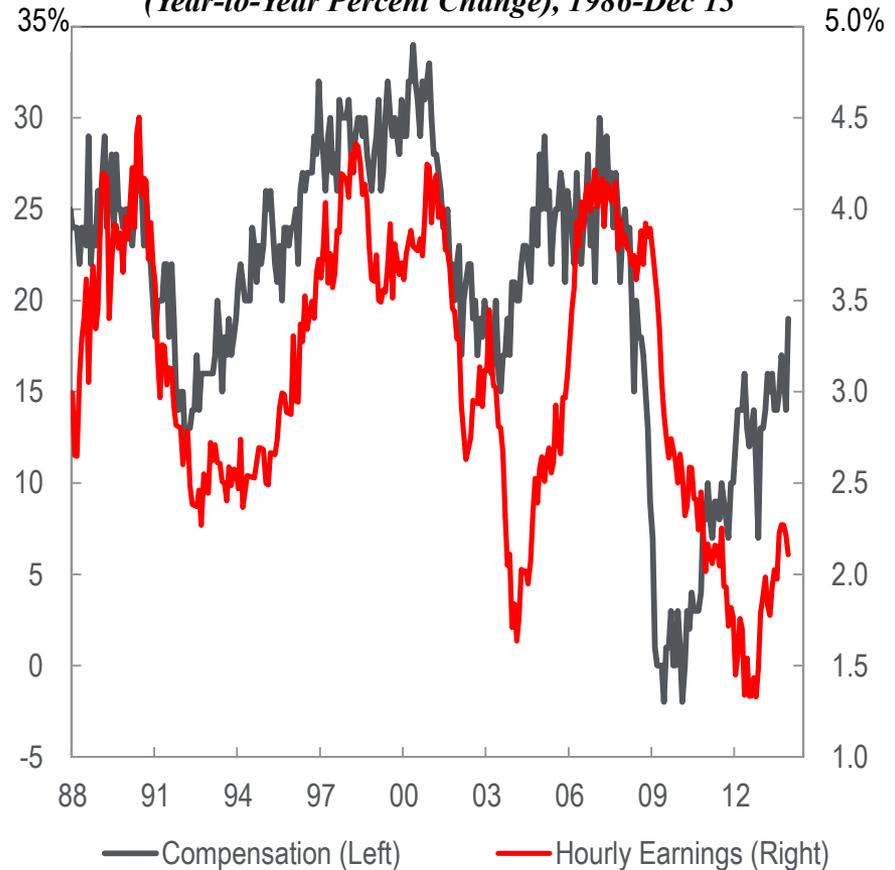
Long-term unemployment and other underutilization measures may not be relevant to wage setting. Unit labor costs appear to be stabilizing as short-term unemployment declines. The latter is nearing 4%

**Short Run Unemployment Rate Gap (Lagged 12-Months) and Unit Labor Costs (Annualized Two-Yr. Avg. Pct. Chg.), 1992-Dec 13**



Source: Bureau of Economic Analysis, Congressional Budget Office, and Citi Research.

**Percent of Small Businesses that Raised Worker Compensation Over Past 3-6 Months and Private Hourly Earnings (Year-to-Year Percent Change), 1986-Dec 13**

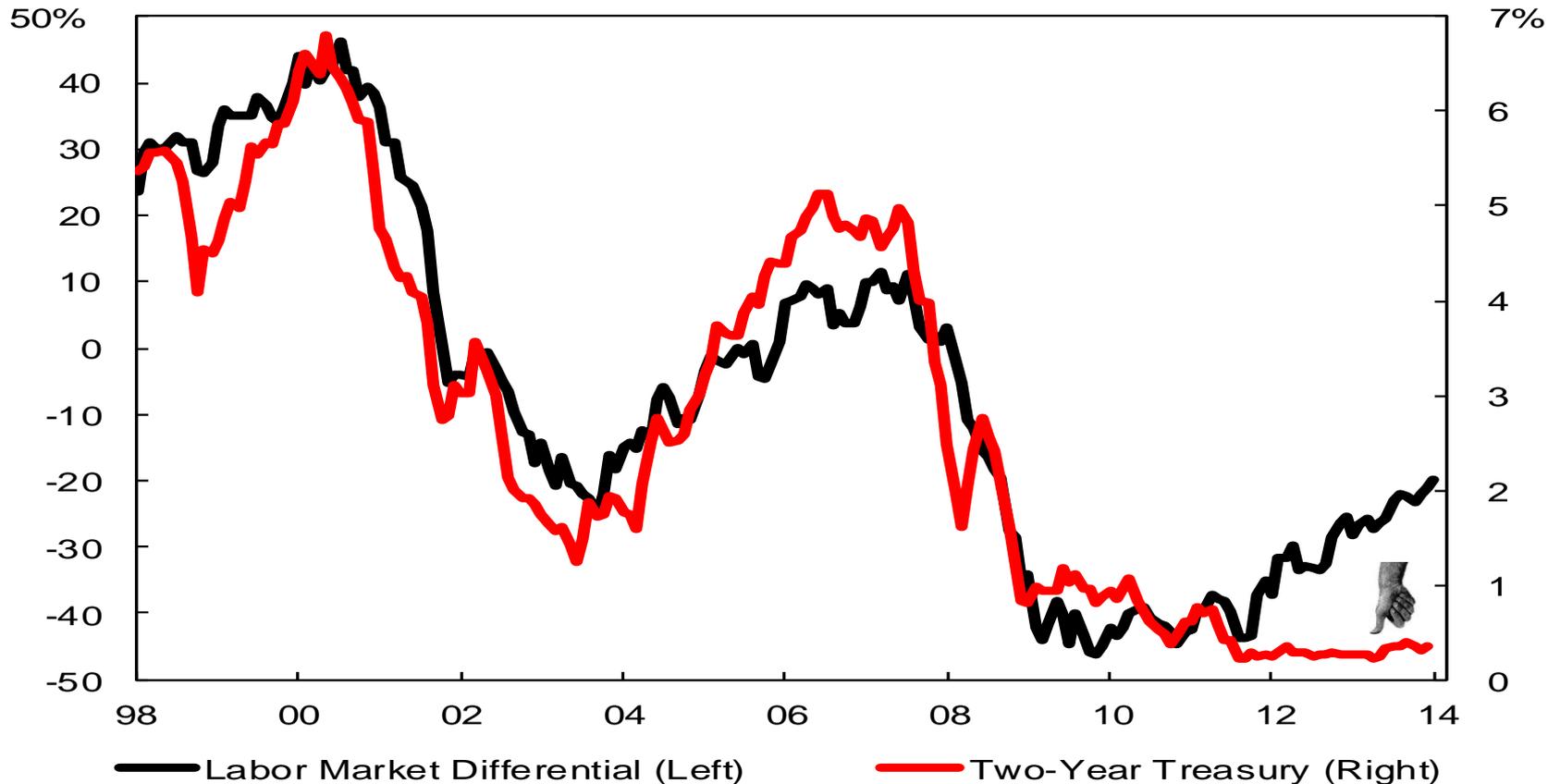


Sources: National Federation of Independent Business and Bureau of Labor Statistics.

# Under Ben's Thumb: Rates Have Decoupled From Improving Outlook

Zero-rate bound and Fed dissatisfaction with labor market improvement have reinforced efforts to cap rate expectations. Strength in hiring guides provides a shadow of forward guidance effect.

Labor Market Differential and Two-Year Treasury Yield, 1998-Jan 14

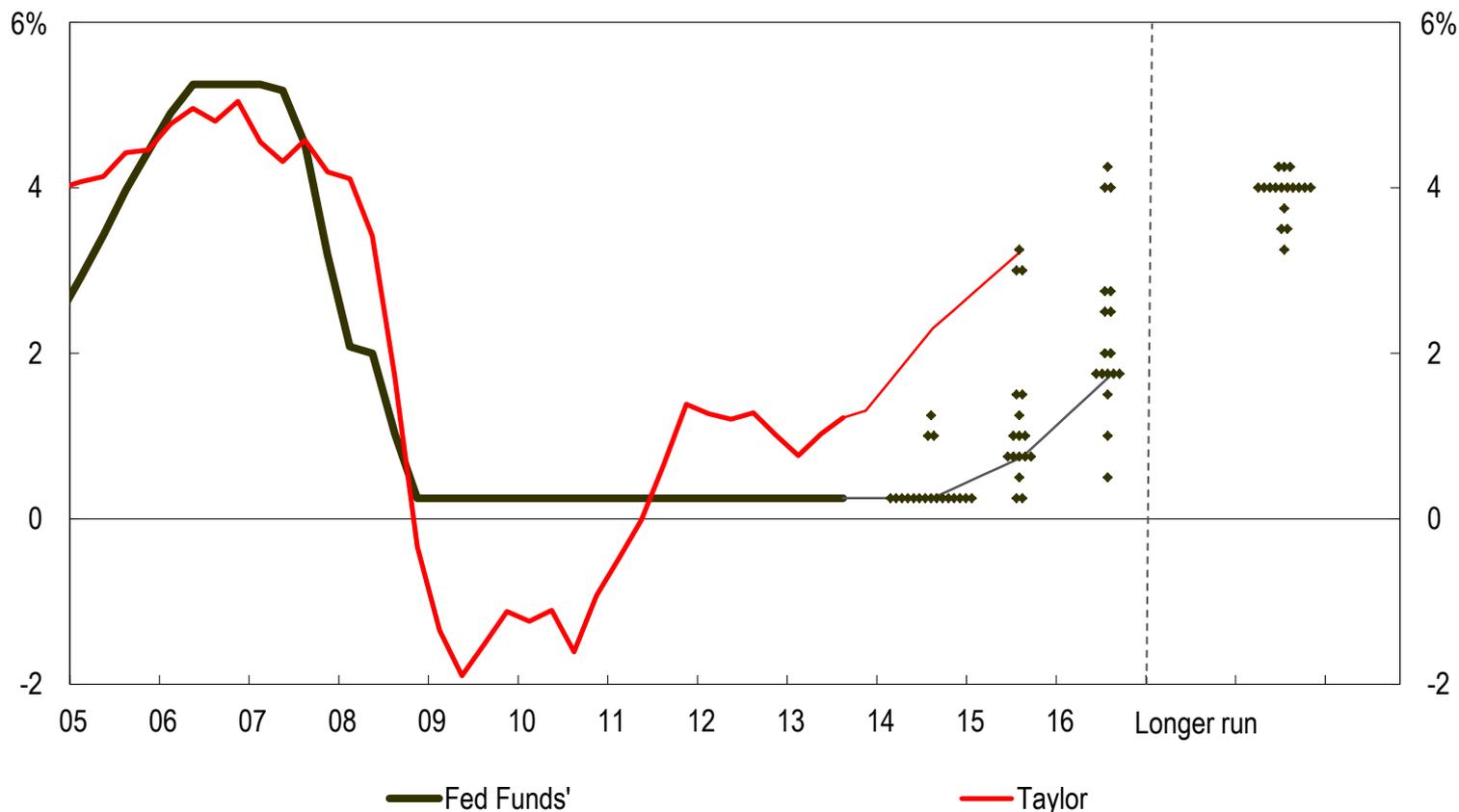


Note: Labor market differential is the share of consumers reporting jobs are plentiful minus hard to get. Sources: The Conference Board and Federal Reserve Board.

# Aggressive Forward Guidance Breaks the (Policy) Rules

Forward guidance that the median Fed projection anticipates fed funds below 2% in late 2015 represents an additional measure of accommodation, beyond what a normative policy rule would prescribe.

## Fed Funds Rate and Employment Based Taylor Rule, 2005-2016E



Notes: Diamonds represent FOMC participants' judgment of appropriate level of the target federal funds rate. Citi forecasts used to estimate path of Taylor rule. Fed funds future path is median of the SEP. Sources: Federal Reserve Board and Citi Research.

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